

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name:

Address:

City:

State: Zip Code:

B. DUNS No.

II. Is the applicant currently receiving EPA Assistance? ☒ Yes ☐ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

N/A The County complies with Title 7 of the CRA 1964 as amended.

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

N/A The County complies with Title 7 of the CRA 1964 as amended.

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

No Compliance reviews have been conducted in the last three years.

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R. 5.140 and 7.95)

☒ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing?

☒ Yes ☐ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?

☒ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator?

☒ Yes ☐ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))

☒ Yes ☐ No

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)

☒ Yes ☐ No

- X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.**

N/A The County complies with Title 7 of the CRA 1964 as amended.

- XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.**

N/A The County complies with Title 7 of the CRA 1964 as amended.

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official

Belen S Leon

B. Title of Authorized Official

APCO

C. Date

03/25/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. *Signature of Authorized EPA Official

B. Title of Authorized Official

C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.



EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name:	Prefix: Mrs.	First Name: Belen	Middle Name:
	Last Name: Leon		Suffix:
Title:	Assistant APCO		
Complete Address:			
Street1:	150 S. 9th street		
Street2:			
City:	el centro	State:	CA: California
Zip / Postal Code:	92243	Country:	USA: UNITED STATES
Phone Number:	4422651800	Fax Number:	
E-mail Address:	belenleon@co.imperial.ca.us		

Payee: *Individual authorized to accept payments.*

Name:	Prefix: Mrs.	First Name: Cassi	Middle Name:
	Last Name: Justice		Suffix:
Title:	Office Supervisor		
Complete Address:			
Street1:	150 S. 9th street		
Street2:			
City:	el centro	State:	CA: California
Zip / Postal Code:	92243	Country:	USA: UNITED STATES
Phone Number:	4422651800	Fax Number:	
E-mail Address:	cassijusticen@co.imperial.ca.us		

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name:	Prefix: Mrs.	First Name: Belen	Middle Name:
	Last Name: Leon		Suffix:
Title:			
Complete Address:			
Street1:	150 S. 9th street		
Street2:			
City:	el centro	State:	CA: California
Zip / Postal Code:	92243	Country:	USA: UNITED STATES
Phone Number:	4422651800	Fax Number:	
E-mail Address:	belenleon@co.imperial.ca.us		

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: Prefix: Mrs. First Name: Belen Middle Name:

Last Name: Leon Suffix:

Title:

Complete Address:

Street1: 150 S. 9th street

Street2:

City: el centro

State: CA: California

Zip / Postal Code: 92243

Country: USA: UNITED STATES

Phone Number: 4422651800

Fax Number:

E-mail Address: belenleon@co.imperial.ca.us

Other Attachment File(s)

* Mandatory Other Attachment Filename:

Add Mandatory Other Attachment

Delete Mandatory Other Attachment

View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment

Delete Optional Other Attachment

View Optional Other Attachment

Project Narrative File(s)

* **Mandatory Project Narrative File Filename:**

[Add Mandatory Project Narrative File](#)

[Delete Mandatory Project Narrative File](#)

[View Mandatory Project Narrative File](#)

To add more Project Narrative File attachments, please use the attachment buttons below.

[Add Optional Project Narrative File](#)

[Delete Optional Project Narrative File](#)

[View Optional Project Narrative File](#)

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. EPA-OAR-OAQPS-22-01	66.034	\$ 481,250.00	\$	\$	\$	\$ 481,250.00
2.						
3.						
4.						
5. Totals		\$ 481,250.00	\$	\$	\$	\$ 481,250.00

Standard Form 424A (Rev. 7-97)
Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
	EPA-OAR-OAQPS-22-01				
a. Personnel	\$ 89,620.00	\$	\$	\$	\$ 89,620.00
b. Fringe Benefits	11,210.00				11,210.00
c. Travel	0.00				0.00
d. Equipment	225,910.00				225,910.00
e. Supplies	0.00				0.00
f. Contractual	148,700.00				148,700.00
g. Construction	0.00				0.00
h. Other					
i. Total Direct Charges (sum of 6a-6h)	475,440.00				\$ 475,440.00
j. Indirect Charges	5,810.00				\$ 5,810.00
k. TOTALS (sum of 6i and 6j)	\$ 481,250.00	\$	\$	\$	\$ 481,250.00
7. Program Income	\$	\$	\$	\$	\$

Authorized for Local Reproduction

Standard Form 424A (Rev. 7-97)
Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	EPA-OAR-OAQPS-22-01	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
9.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12. TOTAL (sum of lines 8-11)		\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ <input type="text" value="481,250.00"/>	\$ <input type="text" value="120,313.00"/>	\$ <input type="text" value="120,313.00"/>	\$ <input type="text" value="120,313.00"/>	\$ <input type="text" value="120,311.00"/>
14. Non-Federal	\$ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15. TOTAL (sum of lines 13 and 14)	\$ <input type="text" value="481,250.00"/>	\$ <input type="text" value="120,313.00"/>	\$ <input type="text" value="120,313.00"/>	\$ <input type="text" value="120,313.00"/>	\$ <input type="text" value="120,311.00"/>

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	EPA-OAR-OAQPS-22-01	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
17.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20. TOTAL (sum of lines 16 - 19)		\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: <input type="text"/>	22. Indirect Charges: <input type="text"/>
23. Remarks: <input type="text"/>	

Authorized for Local Reproduction

Standard Form 424A (Rev. 7-97)
Prescribed by OMB (Circular A -102) Page 2

Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

03/25/2022

4. Applicant Identifier:

ICAPCD - EPA-OAR-OAQPS-22-01

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

Imperial County APCD

* b. Employer/Taxpayer Identification Number (EIN/TIN):

95-6000-924

* c. Organizational DUNS:

7994381060000

d. Address:

* Street1:

150 S. 9th street

Street2:

* City:

el centro

County/Parish:

ca

* State:

CA: California

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

92243-92244

e. Organizational Unit:

Department Name:

Imperial County APCD

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

Mrs.

* First Name:

Belen

Middle Name:

* Last Name:

Leon

Suffix:

Title:

Organizational Affiliation:

ICAPCD

* Telephone Number:

4422651800

Fax Number:

* Email:

belenleon@co.imperial.ca.us

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

D: Special District Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities
Relating to the Clean Air Act

* 12. Funding Opportunity Number:

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

Goal is to provide communities with means to monitor the air quality and aid in the understanding of real-time data, which are well-aligned with the EPA program objectives.

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant * b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="481,250.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="481,250.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed:

ICAPCD roles, responsibilities, and experience

ICAPCD: From a technical standpoint, ICAPCD is the authority for air quality matters in Imperial County. Their knowledgeable and capable staff oversee the County's regulatory monitoring network and are responsible for preparing the County's SIPs, which are comprehensive plans for addressing air pollution in the region. Through decades of research, enforcement, and data collection, ICAPCD has developed extensive knowledge of the various pollution sources across Imperial County. A substantial part is analyzing available control measures and determining how best to implement or enhance them to effect permanent emission reductions. When the time comes to begin instituting emission reduction strategies in the Community, ICAPCD will be well positioned to assist and advise. They will be able to take advantage of their knowledge of control measures and how they might intersect with the various rules, laws, and control measures already implemented by federal, state, and their own District actions. It will be the responsibility of ICAPCD with this knowledge toward the successful execution of the Plan.

Project Oversight Managers

APCO: Plan, direct and control the administration and operations of project. Analyze budget and technical reports; interpret and evaluate staff reports observe performance and evaluate staff; problem solve department related issues.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in chemical or environmental engineering or related field and five (5) years increasingly responsible experience in the inspection and investigation of sources of air pollution including two (2) years in a supervisory capacity

Assistant APCO: Technical and administrative assistance in the management of the project and activities in the areas of operations, planning, and monitoring. The incumbent will be actively involved with coordinating activities and determining decisions for this project.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in chemical or environmental engineering or related and four years increasingly responsible experience in the inspection and investigation of sources of air pollution including two years in a supervisory capacity.

Division Manager- Lead to complete tasks and meet goals of the New River Monitor. Ensuring that all employees are following regulations and workplace laws. It also means handling any safety concerns in a timely manner.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in chemical or environmental engineering or related and three years increasingly responsible experience in the inspection and investigation of sources of air pollution.

Monitoring Specialist: responsible for organizing the monitoring exercises required by the ICAPCD rules, and to ensure that the Programmer of Activities is fully compliant with all ICAPCD rules and the agreed and documented monitoring procedures of ICAPCD and Sonoma Technology. Monitoring Technicians: Will Assess and maintain air quality by managing emissions and enforcing compliance of applicable laws. Perform air quality tests when necessary, analyze data and troubleshoot problems.

EDUCATION AND EXPERIENCE:

Education, training and/or experience that demonstrate possession of the knowledge, skills and abilities listed above. Examples of qualifying education/experience are: Three (3) years of experience installing, inspecting, operating and repairing analog and digital air quality monitoring equipment and recording devices for an industrial or public agency. OR: Two (2) years of experience installing, inspecting, operating, and repairing analog and digital air quality monitoring equipment and recording devices for an industrial or public agency, AND, thirty (30) semester units of college level course work in electronics or a closely related field.

Project Title: Air Quality Monitoring Along the New River in Imperial County, California

Applicant Information: Imperial County Air Pollution Control District

Address: 150 S 9th St., El Centro, CA 92243

Point of Contact: Belen Leon-Lopez; phone: 442-265-1800; email: BelenLeon@co.imperial.ca.us

DUNS Number: 799438106

Brief Description of Organization: The Imperial County Air Pollution Control District (ICAPCD) is the regulatory agency responsible for air quality in the Imperial County region. Our knowledgeable and capable staff oversee the County's regulatory monitoring network and are responsible for preparing the County's SIPs, which are comprehensive plans for addressing air pollution in the region. Through decades of research, enforcement, and data collection, ICAPCD has developed extensive knowledge of the various pollution sources across Imperial County. A substantial part of the agency's work is analyzing available control measures and determining how best to implement or enhance them to effect permanent emission reductions.

Project Location: Imperial County communities

Calexico, CA, 92231

Seeley, CA, 92276

Brawley, CA, 92227

Air Pollutant Scope: Hazardous Air Pollutants including Hydrogen Sulfide (H₂S), Ammonia (NH₃), Benzene, Toluene, Xylenes (BTX), Volatile Organic Compounds (VOCs), PM_{2.5}

Budget Summary:

EPA Funding Requested	Total Project Cost
\$481,250	\$481,250

Project Period: November 2022–September 2025

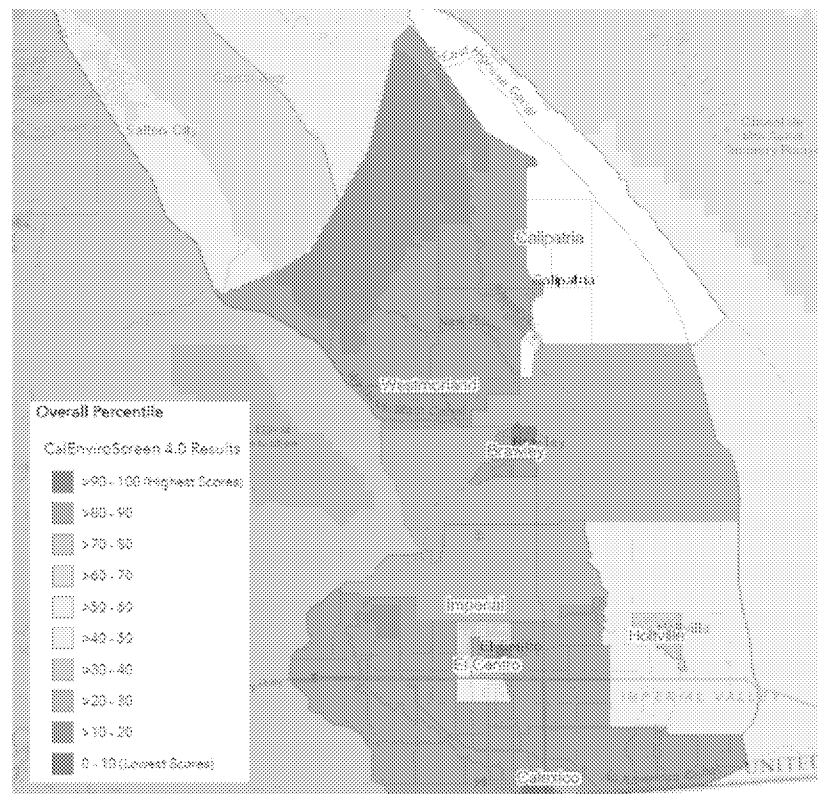
Short Project Description: In this proposal, we are seeking to expand upon the current air quality monitoring work being conducted to better understand the potential air quality impacts of the New River. Air monitoring equipment will be relocated to the environmentally burdened communities of Seeley and Brawley, CA, which also border the New River. Monitoring will occur for one year at each site and includes measurements of hazardous air pollutants including H₂S, NH₃, and BTX, and meteorological parameters. Mid-cost and low-cost sensors will also be deployed in Calexico, Seeley, and Brawley for a 3-year period. All data will be displayed on a public-facing website.

1. Project Summary and Approach

Imperial County extends over 4,284 square miles in the southeastern portion of California, bordering Mexico to the south, Riverside County to the north, San Diego County to the west, and Arizona to the east. The air quality in this region is among the worst in both California and Mexico, with Imperial County, California, currently labelled as a nonattainment county by the EPA for exceeding PM_{2.5} and ozone standards.^{1,2} The air quality is a major concern for its nearly 181,000 residents. The county experiences consistently high levels of air pollution and also has one of the state's highest rates of asthma hospitalization and emergency room visits for school-aged children. Like many other regions in the United States, the poor air quality impacts a largely Latino community (over 80% of the county population), with high rates of unemployment or poverty.

The California EPA and Office of Environmental Health Hazard Assessment's (OEHHA) CalEnviroScreen tool identifies which communities throughout the state continue to bear a disproportionate burden of pollution. Figure 1 highlights the Imperial Valley and shows that each of the populated census tracts in the region have a CalEnviroScreen 4.0 score in at least the 70-80th percentile, compared to the rest of the state. These communities are environmentally disadvantaged.

Figure 1. Map depicting CalEnviroScreen 4.0 results for the Imperial Valley. Census tracts with significant populations have pollution burdens in at least the 70-80th percentile.³



¹ California Air Resources Board (2018) Imperial County – Mexicali work plan to improve air quality in the border region. Working Group Draft, December. Available at <https://ww3.arb.ca.gov/planning/border/workplan.pdf>.

² U.S. EPA Current Nonattainment Counties for All Criteria Pollutants. Available at <https://www3.epa.gov/airquality/greenbook/ancd.html>.

³ California Office of Environmental Health Hazard Assessment (OEHHA), 2021. CalEnviroScreen 4.0. Available at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

All residents of the region share a common environment and have similar exposures to pollution; as a result, air quality in the region has long been studied. For years, these studies have focused on obtaining quantitative measurements that shed light on the transport of pollution from the nearby industrial city of Mexicali and how it influences air quality across the border.^{4,5} However, within the county, major pollution sources include emissions from agricultural production and burns, vehicle exhaust, diesel particulate matter, and wind-blown dust.

The New River, which flows north from Mexico into the Imperial Valley, is also one of the most important pollution sources in the region. The contamination of the river has been known for decades, as it contains bacteria and pesticides from municipal waste, undertreated industrial wastewater, and agricultural drainage. While the U.S. portion of the river is tested on a monthly basis by the California Regional Water Quality Control Board, little is known about the river's impact on air quality within the Imperial Valley. Developing a better understanding of the New River's air quality impacts is a major focus for the Imperial County Air Pollution Control District (ICAPCD) and is a critical step in working towards improving environmental quality and human health in the region.

The Calexico-Heber-El Centro corridor was designated as an AB 617 community in 2018 and selected to conduct community air monitoring under the California Air Resources Board (CARB) Community Air Protection Program (CAPP). After considering community input, the Calexico-Heber-El Centro corridor Steering Committee selected monitoring along the residential or recreational area along the New River. Since December 2021, air quality measurements have been conducted at the City of Calexico's Water Treatment Plant, in an effort to better understand the potential air quality impacts of the river. The initial project included funding for 6 months of high-quality ambient measurements of speciated VOCs, hydrogen sulfide (H₂S), ammonia (NH₃), polychlorinated biphenyls (PCBs), pesticides, and meteorological parameters. Meteorological data, H₂S, NH₃, benzene, toluene, and o-xylene are monitored continuously and provide high-time-resolution data (at 1-, 5-, or 10-minute intervals). Whole air canisters and high-volume samples collected on poly-urethane foam (PUF) cartridges are used to identify a wide variety of VOCs, PCBs, and pesticides, on a 4-day (canisters) or 6- or 12-day (PUF samples) cycle. That project is separately seeking additional funding through the AB 617 grant to extend operations for an additional 6 months or until November 2022. By doing so, air quality in Calexico can be characterized throughout all seasons and meteorological conditions.

Regulatory air quality monitoring sites in Imperial County are located in Calexico, El Centro, Brawley, and Westmorland. These monitoring stations primarily measure criteria pollutants, such as ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), PM_{2.5} and PM₁₀. A CARB-run monitoring site also measures speciated PM_{2.5}, toxics, and Cr6+; however, those data are not readily available. Additionally, community-level air quality data are available through the IVAN Air Monitoring Network, which was established by the community group Comité Civico del Valle (CCV) in

⁴ Chow J.C., Watson J.G., Green M.C., Lowenthal D.H., Bates B., Oslund W., and Torres G. (2000) Cross-border transport and spatial variability of suspended particles in Mexicali and California's Imperial Valley. *Atmos. Environ.*, 34(11), 1833-1843, September 26. Available at <https://www.sciencedirect.com/science/article/abs/pii/S1352231099002824>.

⁵ Rios G. (1995) Imperial Valley/Mexicali cross border PM10 transport study. Report by U.S. EPA Region IX, San Francisco, California, April. Available at https://www3.epa.gov/ttn/catc1/cica/other2_e.html.

2013. The network consists of 40 low-cost sensors that monitor PM concentrations and display data to a public website.

This proposed monitoring project plans to combine aspects of both of the existing regulatory and community-focused monitoring efforts, but with an emphasis on the New River. We recommend continuing to use these existing instruments for two more years of measurements at other sites in Imperial County that are in close proximity to the New River. The monitoring shelter and air quality equipment currently deployed in Calexico will be moved to additional areas downwind of the New River in Seeley and Brawley, as shown in Figure 2.



Figure 2. A map of the Imperial Valley, California showing where the current New River monitoring project is being conducted in Calexico, as well as the proposed monitoring locations in Seeley (west) and Brawley (north).

The community of Seeley, a census designated area with about 1,600 residents, is located 5 miles west of the city of El Centro. Seeley is bordered by the New River to the west and surrounded by farmland. As a result, it is impacted by agricultural activities and emissions from burning, pesticide application, and particulate matter, in addition to potential impacts from the river. The second monitoring location of interest is Brawley, a city of more than 26,000 residents located about 15 miles southeast of the Salton Sea. Brawley scores in the 82-91 percentiles in CalEnviroScreen, with

major pollution sources from agricultural burning, pesticide application, roadway emissions, and dust from receding Salton Sea shores. Brawley is also bordered directly by the New River. Each of these communities would gain valuable information about their potential exposure to air toxics from a year of high-quality air monitoring and reporting.

Our approach consists of three tiers of air quality monitoring that will allow us to gain a better understanding of New River's regional air quality impacts:

- **Tier 1** is for high resolution and high-quality continuous monitoring data to be collected for a period of one year at each monitoring site. Pollutants to be monitored include H₂S, NH₃, VOCs (BTX), and meteorological parameters (wind speed, wind direction, temperature, relative humidity). H₂S and NH₃ will be measured at 5-minute frequency. Meteorological data will be collected at 1-minute resolution, but aggregated to a 5-minute value to match the point monitors. The VOC analyzer reports BTX data at 10-minute intervals.
- For **Tier 2** of monitoring, we are proposing to install three VOC sensors capable of measuring BTEX compounds in Calexico, Seeley, and Brawley for the entire duration of this grant award. This approach will allow for continued measurements at these important community sites, even in the absence of the monitoring shelter. These sensors will help bridge the gap between the full suite of compounds measured at the monitoring shelter, or at regulatory monitors in the region, and the PM concentration data reported by small sensors already deployed in the area. Increasing the spatial coverage for toxic gas concentration reporting will be valuable for the local communities and provide key information about the potential health impacts from pollution sources in the region.
- **Tier 3** involves the deployment of small sensors that can measure total VOCs, NO₂, and PM_{2.5} (such as the Clarity node), throughout Calexico, Seeley, and Brawley. These small sensors will improve the spatial coverage of VOC measurements and will complement the existing community monitoring network. We propose to engage the IVAN monitoring network and potentially install the VOC small sensors at the same locations, expanding the capabilities of their network.

All monitoring data will be made available to the public in near-real-time on a website developed just for this project. The site will also include educational content explaining project objectives and instrument capabilities; contextual information about the data and compounds measured to aid in data interpretation; and historical data and annual reports. In addition to providing measurements, the website will provide a place for ongoing community engagement. Other community engagement activities will include public meetings where study results can be presented and workshops with the communities hosting sensors to learn more about their air quality concerns.

2. Community Engagement

Community Workshops. ICAPCD will host community workshops upon receipt of project award, with community members from Seeley and Brawley. As these two communities are not part of the Calexico-El Centro-Heber AB 617 corridor, we will introduce them to the existing New River monitoring project and its goals. We will engage with this community to better understand their pollution concerns are in regard to the New River. We will use their input to determine potential host sites for the mid-cost and low-cost BTEX and PM sensors. We also plan to leverage our existing relationship with CCV and the IVAN Monitoring Network. We will elicit their input on site selection for sensors to be distributed in the communities of Calexico, Seeley, and Brawley, as a way to reach areas of concern and expand their monitoring network capabilities.

Throughout the duration of the project, the project team will continue to hold community workshops to present project summaries. These will include a description of the work accomplished to date and status of monitoring, including a summary of any problems encountered and how they were addressed.

As part of our commitment to community engagement and outreach, the ICAPCD staff operates and maintains a website dedicated to AB 617 activity, Border Activity, Grants, and other APCD activities in Imperial County. Further, we hold AB 617 meetings every second Wednesday of each month. We intend to continue both the operation of the website and regular meetings with the public throughout the duration of this grant period.

Data Reports and Presentations to the Community. Upon completion of each 12-month monitoring period, a report summarizing all statistical analysis, overall data completion, and achievement of data quality objectives will be generated. These reports will be prepared within 45 days of the completed measurement collection at each site. Once the report is finalized by ICAPCD, a summary of the project findings will be presented to the Imperial Valley community.

3. Environmental Justice and Underserved Communities

This project will support air quality monitoring efforts in the economically and environmentally overburdened communities in Imperial County. Imperial County is currently designated as marginal to moderate nonattainment status for PM_{2.5} and ozone, meaning it does not currently meet U.S. EPA air quality standards for these criteria pollutants. Major regional emission sources include vehicle traffic, agricultural and waste burning, windblown dust, and industrial processes. Moreover, at the southern end of the county in Calexico, air quality is greatly impacted by emissions from Mexicali, an industrial city of over 1 million people just across the international border.

Much of region has been designated as a disadvantaged community by CalEnviroScreen, with a pollution burden higher than at least 70% of the rest of the state. The major contributors to that pollution burden according to the CalEPA site are pesticides (all of the region is in the 50-90 percentile for pesticide use) and diesel PM in the more populated areas of the state (50-90th percentile). High asthma rates (60-90th percentile), poverty, and high unemployment rates exacerbate the pollution burden.

4. Project Plan – Output, Outcomes, and Performance Measures

With our knowledge of the Imperial Valley and a qualified subcontractor’s extensive experience in conducting these types of measurements, we believe that ICAPCD is capable of successfully achieving project objectives and delivering much needed, high-quality information to local communities. Our project will provide an effective solution for a region and community that has a critical need.

The project is organized into six major tasks:

- Task 1: Project Management
- Task 2: Site Selection, Equipment Procurement, and Installation
- Task 3: Website Development
- Task 4: Operation and Maintenance of Equipment
- Task 5: Data Review and Validation
- Task 6: Reporting and Community Engagement

4.1 Overall Approach

As part of the existing New River Monitoring Project, ICAPCD approved a Monitoring and Data Management Plan (MDMP), which documents the measures taken by the project team to ensure that the data collected meet quality assurance objectives. For this proposed monitoring plan, relevant components of the MDMP are described in the following sections.

4.1.1 Equipment

Table 1 provides a list of equipment that the team will use to complete this project and includes measurement techniques for each of the pollutants to be monitored. The selection of the mid-cost BTEX sensors and PM/tVOC small sensors for distribution in Calexico, Seeley, and Brawley will be finalized at a later date, but will be available on a timeline conducive to project objectives. Ideal sensors be based on established technology and be commercially available, will have the option for

running off of solar power, will not require calibration standards, and have cellular connectivity. Based on these criteria, a leading candidate for the mid-cost VOC sensor is the Omniscent 2100 VOC analyzer. The Clarity node is being considered for the Tier 3 small sensor option. For guidelines of operation of each piece of equipment, existing SOPs will be followed, or new ones will be developed as needed.

Table 1. List of air quality equipment to be deployed at monitoring sites along the New River.

Category	Equipment
Tier 1 (Existing Equipment)	
Equipment Shelter	<ul style="list-style-type: none"> Shelter One air quality monitoring shelter (8'W x 10'L x 8'H)
Ammonia Analyzer	<ul style="list-style-type: none"> Teledyne T201 chemiluminescence analyzer with NH₃ converter
Hydrogen Sulfide Analyzer	<ul style="list-style-type: none"> Teledyne T101 UV fluorescence H₂S analyzer
Calibration Gas Delivery System	<ul style="list-style-type: none"> Teledyne T700 Dynamic Dilution Calibrator Teledyne T701 Zero Air System
VOC Analyzer	<ul style="list-style-type: none"> ENMET eGC Environmental Analyzer for BTX monitoring
Meteorological Station	<ul style="list-style-type: none"> RM Young 5305 wind speed/direction probe RM Young 41382 temperature/relative humidity sensors
Data system at site	<ul style="list-style-type: none"> Campbell Scientific CR1000X data logger Sierra Wireless MP70 cellular modem
Tier 2 (New Sensor for Community Deployment)	
VOC Analyzer	<ul style="list-style-type: none"> Sensor to be determined
Tier 3 (Sensor for Community Deployment)	
Small Sensors	<ul style="list-style-type: none"> Sensor to be determined

4.1.2 Site Selection and Setup

Monitoring site locations in Seeley and Brawley will be selected for ambient air quality monitoring based on (1) proximity to the New River, (2) adequate security and infrastructure for shelter and equipment installation, and (3) proper siting for air quality and meteorological equipment. APCD staff have already spoken with potential monitoring shelter hosts at the Seeley Water District and a community group in Brawley. Additional visits will be required in advance of installation to identify potential monitoring sites that meet site selection criteria. We believe that the selection of an appropriate monitoring site that meets the above criteria will encourage achievement of 75% data completeness (per federal standards).

For the Tier 2 and Tier 3 equipment, sites will be based on similar security, infrastructure, and siting logistics (e.g., away from point sources, unobstructed air flow, etc.). In addition, we will engage with community members to better understand where they believe monitoring gaps exist. We will elicit their input during community workshops held at the beginning of the project. We may also suggest

deployment at locations that already host the IVAN community monitors as a way to expand the network's capabilities. Routine site and equipment checks will be carried out to ensure high data completeness for the small sensors as well.

4.1.3 Operations and Maintenance

All monitoring equipment will be configured and calibrated per their respective SOPs, pre-approved District protocols, and EPA federal standards. Each site visit will be recorded in the site notebooks and on standard maintenance forms provided in the SOPs. At a minimum, operation and maintenance (O&M) tasks will be performed monthly, or sooner if the data indicate a problem that needs a site visit. To guarantee the federal standard of 75% data completeness, data will be checked daily to identify when an instrument needs attention. All installations, configurations, and calibrations will be performed according to the MDMP, corresponding instrument SOPs, EPA QA Volumes II & IV, manufacturer's operation manuals, and all pre-approved District protocols, including recordkeeping.

4.1.4 Website and Data Dissemination System

A public-facing website will be designed and developed for this new phase of the New River monitoring project, in an effort to provide local communities with air quality information. We will seek the aid of a subcontractor with experience in disseminating monitoring data for either regulatory or community-focused projects. At a minimum, the New River monitoring website will provide:

- Educational content that explains the objectives and capabilities of the air monitoring program and establishes context
- General layout of the website that includes data, information to put the data into context, and other supporting information
- Additional contextual and factual information about the data, compounds, and program to ensure proper interpretation of the data
- Spatial and time series displays of real-time fenceline and community data and historical data, including meteorology, with sufficient documentation to promote accurate interpretation of the data
- Summaries of the chemical data
- Real-time data updated within 10 minutes of data collection

4.1.5 Data Validation and Reporting

Upon completion of each 12-month monitoring period in Seeley and Brawley, a report summarizing all statistical analysis, overall data completion, and achievement of data quality objectives will be generated. The report will also include updates on work accomplished, problems encountered, corrective action and resolution where applicable, and the finalized data set with an explanation of invalid or missing data. Findings will be presented to the community during public meetings, held

roughly 60 days after the completion of monitoring at each site. Reports will also be posted to the public website.

4.2 Expected Outcomes

Expected outputs and outcomes are as follows:

1. Project planning (Tasks 1-3). **Outputs:** community-approved monitoring site selection; equipment selection and procurement; subcontractor selection for website development, assistance in equipment operation and maintenance, and data validation. **Outcomes:** improved understanding of community concerns to be addressed during the measurement work.
2. Conduct air quality measurements near of the New River; report data in real-time; analyze data to assess New River Impact (Tasks 4-5). **Outputs:** monitoring and meteorological equipment in an EJ community; data collection downwind of a potential emission source; near-real-time air quality data availability for the community. **Outcomes:** first-of-its-kind data to assess impact of the New River on local air quality.
3. Reporting (Task 6). **Outputs:** technical report summarizing findings presented to community. **Outcomes:** better understanding of the air quality impacts of the New River; community gains valuable information about the air they breathe; encourages potential mitigation.

4.3 Work Plan and Schedule

As previously described, the scope of work outlined in this proposal is divided into six, clearly defined tasks. A proposed work plan for all tasks is shown in Table 2 and reflects a total project timeline of 3 years.

Table 2. Proposed work plan organized by task, with a description of work to be done, and estimated dates of completion.

Task	Description of Task	Estimated Dates
1. Project Management	Project coordination. Tracking of project milestones, deliverables, and data quality.	October 2022 – February 2025
2. Site Selection, Equipment Procurement, and Installation	Procurement of monitoring sites in Seeley and Brawley. Selection and procurement of mid-range and small sensors for community deployment. Relocation of monitoring shelter each year.	Fall 2022; Fall 2023
3. Website Development	Design and implement public-facing website.	October 2022 – December 2022
4. Operate and Maintain Equipment	Operation of air quality equipment and public-facing website.	December 2022 – November 2024
5. Data Review and Validation	Daily checks of data to ensure high data completeness. Validation of monitoring data on quarterly and yearly basis.	December 2022 – February 2025
6. Reporting and Community Engagement	Community presentations of data collected during each year of monitoring. Host community workshops throughout project duration.	December 2022 – February 2025

5. Quality Assurance (QA) Statement

Our QA statement has been included as a separate attachment.

6. Cost Proposal

Our total budget is \$481,250, and is detailed in Table 3. This includes \$106,640 for ICAPCD staff time (salary, benefits, and indirect charges) for outreach with the community and local government officials; procurement of monitoring equipment and supplies; time supporting air quality measurements and day-to-day operations of the measurements; and development of summary reports of monitoring efforts. It also includes \$148,700 of contractor services for (1) \$36,000 for development and operation of public-facing website to disseminate monitoring data in real-time; (2) \$41,700 for support with installation, operation and maintenance of air quality monitors, meteorological sensors, and sensors distributed within the communities of Seeley and Brawley; (3) \$71,000 for data review and validation, quality control and assurance checks (QA/QC), analysis of

two-years' worth of monitoring data. We will work with EPA to devise an updated project plan or budget if required, should less than \$481,250 of funding be available.

Table 3. Project budget for three years of funding.

Line and Itemized Costs	EPA Funding
Personnel (all staff by title; annual salary, % time to project, total cost for budget period)	
Project Management (1 Project Manager, 1 APCO, 1 Division Manager avg \$82 dills/ 400 hrs)	\$32,800
Project Staff (1 monitoring technician, 2 monitoring specialist, 1 Environmental Coordinator avg. \$46 dills/ 1235 hrs)	\$56,820
Total Personnel	\$89,620
Fringe Benefits (percentage used, basis for computation, types of benefits included)	
12.5% fringe benefit include Medicare, Disability, and Health Insurance.	
Total Fringe Benefits	\$11,210
Equipment and Supplies	
Crane and shipping rentals to move air quality shelter; electrical power connections; consumables and servicing for existing monitors; procurement of 3 BTEX sensors and 9 PM/VOC sensors for the community	
Total Equipment	\$225,910
Contractor Services	
Development and operation of public-facing website	\$36,000
Support with installation, operation and maintenance of air quality monitors, meteorological sensors, and community sensors	\$41,700
Data review and validation, quality control and assurance checks (QA/QC), data analysis	\$71,000
Total Contractual	\$148,700
Indirect Charges	
Total Indirect Charges	\$5,810
Total Funding	\$481,250
Total Project Cost	\$481,250

5. Quality Assurance Statement

Goals of this study are to provide communities with means to monitor their air quality and aid in their understanding of real-time data, which are well-aligned with the EPA program objectives. To achieve those goals, we utilize a well-developed Monitoring and Data Management Plan (MDMP), which documents the measures taken by the project team to ensure that the data collected meet quality assurance objectives. As part of the existing New River Monitoring Project, ICAPCD approved an MDMP. It will be updated as needed for this proposed work effort. This section describes the general data management operations plan and prescribes data quality objectives for the proposed study.

Data Acquisition and Telemetry

We plan to use our contractor's systems for data acquisition and data management. Data captured onsite will be transferred in near-real time through a data acquisition system to a Data Management System (DMS). The DMS will be able to perform automatic quality-control checks on the data, detect and label outliers, identify analyzer or data ingestion problems, and generate alerts to project staff for review and problem solving. As part of the auto-screening process, QC flags are assigned as follows: (1) **Valid** – which means data are within normal operating parameters; (2) **Invalid** – which means data do not meet the quality control criteria; (3) **Suspect/Questionable** – which indicated data should be reviewed further; (4) **Missing** – which means data have not been received by the DMS. The automated data QC process will also flag any data with high concentrations, large fluctuations, or stuck data values as suspect/questionable for additional manual review and verification.

Data QC and Validation

Data will be manually reviewed on a daily basis by an experienced Data Analyst, using an internal DMS website to conduct QC procedures. The will check for common data problems such as flat signal/constant values, no signal/missing data, extremely noisy signal, rapid changes (spikes or dips), and negative concentrations, and inform the project team. As part of the data validation process, the Data Analyst will further assess data for reasonableness. This validation procedure includes:

- Evaluating the monthly summaries of the minimum, maximum, and average values
- Inspecting the data for statistical outliers
- Ensuring the data is reasonable when compared to background concentrations and/or nearby monitoring sites, where possible
- Ensuring the data or measurements are realistically achievable and not outside the limits of what can be measured.

To oversee the data QC and validation process, we plan to work with an experienced contractor and subject matter expert, who will serve as the Quality Assurance Officer. They will work closely with the Data Analyst and other project team members focused on QA/QC tasks.

Data Quality Objectives

To ensure quantitative accuracy of field measurements, measurement performance criteria are established as part of the monitoring design. Data quality is defined in terms of the degree of precision, accuracy, representativeness, comparability, and completeness needed for the monitoring. The principal indicators of data quality for this study are data completeness, precision, and accuracy. For all sensors, the data completeness objective for valid data is between 75-90%, although for small sensors that target may need to be adjusted due to extenuating deployment logistics. Performance criteria (precision and accuracy) are shown in Table 1. These criteria were partially guided from the EPA QA Handbook Volumes II and IV. For the Tier 2 and Tier 3 sensors, routine calibration is not required. However, upon analyzer selection, we will work with sensor manufacturers to determine typical performance checks and develop acceptance criteria as appropriate.

Table 1. Performance criteria for the monitoring equipment deployed along the New River.

Sensor	Test	Acceptance Criteria for Precision and Accuracy
H ₂ S Point Monitor	Gas span test: 0, 250, 150, 50 ppb	±20%
NH ₃ Point Monitor	Gas span test: 0, 250, 150, 50 ppb	±20%
Environmental Gas Chromatograph	Gas span test: 10 ppb (benzene, toluene, o-xylene)	±25%
Wind Speed	Starting threshold test; transfer function test	±0.25 m/s below 5 m/s ±5% above 5 m/s
Wind Direction	Angle verification test	±5 degrees
Temperature	Two point test	±0.5°C
Relative Humidity	Psychrometer verification test	±7%

Recordkeeping/Record Retention

Documents and records that will be created as part of the project include site logs, chain of custody information, internal and independent audit findings, field samples, raw and validated data, and reports. Copies of all records and documents will be retained by ICAPCD for a minimum of five years following the completion of the study.

Manifest for Grant Application # GRANT13580457

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 22952 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16047 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24167 bytes)

3. Form SF424A-V1.0.pdf (size 22595 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22700 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 15904 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37207 bytes)

Attachments Included in Zip File (total 3):

1. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1234-ICAPCD roles.pdf application/pdf (size 119212 bytes)

2. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1235-ICAPCD EPA Grant_New River Pollutant Monitoring Proposal_final (3-25-2022).pdf application/pdf (size 588966 bytes)

3. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1236-Quality Assurance statement (3-25-2022).pdf application/pdf (size 143678 bytes)